

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Continuation Application of	)
William J. Mertz, Danny Charles Thompson	)
Katherine Yiu-Kit Leung	)
*	)
Serial No. 10/657,394	) Examiner: Christopher Keehan
	)
Filed: September 8, 2003	) Group Art Unit: 1712
P DULLAGE LEWE AND DECORGO	)
For: RELEASE LINER AND PROCESS	)
FOR MAKING THE SAME	)

## <u>PURSUANT TO 37 C.F.R. § 1.132</u>

- I, Danny Charles Thompson, hereby declares as follows:
- I am Manager Product Development with Loparex, Inc., the assignee of the present patent application. Loparex, Inc is the largest commercial supplier of siliconized release papers and films. I am also one of the inventors in the present application.
- 2. My formal education includes a Master of Chemical Engineering degree from Virginia Tech in 1986.
- 3. I have over twenty-two (22) years of experience in the field of chemical coatings with emphases on polymer chemistry and silicone chemistry. As the Manager of Product Development my primary responsibilities include overseeing new product development projects for specific customer applications.
- 4. In my present position and throughout my career, I have conducted and supervised research in the development of new products in the silicone release liner area. In addition, I hire, train, and supervise other engineers working in the field of silicone release liner

research and development. Accordingly, I have a good understanding of the level of skill and knowledge possessed by those of ordinary skill in the art of silicone release liner technology.

- 5. I have reviewed the Examiner's argument rejecting claims 1-11 as being anticipated by or, in the alternative, obvious over WO 98/28376 to Kerr et al. ("Kerr") in the Office Action dated January 27, 2005.
- 6. I have studied Kerr and it discloses release compositions having a curable epoxyorganosiloxane, a cross-linkable silicone hydride resin having no epoxy functionality and a curing agent. The composition is coated onto a substrate and cured using actinic radiation. Kerr does not use a solvent to disperse the composition, and in fact, discourages the use of a solvent due to environmental concerns.
- 7. As one of ordinary skill in the art, it is my opinion that the composition of Kerr cannot result in a release liner having a reduced level of total silicone extractables. The examples of Kerr show that the materials are UV cured at room temperature, whereas, in the present invention, UV cure with high temperature exposure is used for reducing extractables. The combination of higher temperature and lower coat weight of the present invention reduces extractables to 1/5 of the Kerr product, and volatiles to 1/10 of the Kerr product.
- 8. As one of ordinary skill in the art, it is my opinion that the composition of Kerr cannot result in the same product with the extreme low levels of extractables as in the present invention. A solvent-free coating does not inherently result in a volatile-free-coating. Example 6 in the present application provides an analysis of the volatile content by outgassing, wherein the main component is siloxanes. The release liners of the present invention have 1/10 as much outgassing material as a release liner prepared using a UV cure silicone system applied without a solvent as in Kerr. In fact, as illustrated in the table in Example 6, the total siloxanes

listed in Sample C is 57 nanograms/square centimeter, while Sample D lists the total siloxanes as 32 nanograms/square centimeter. These values can be contrasted to the control Example E, the same as Kerr's Example 1, wherein the total siloxanes are measured at 474 nanograms/square centimeter. Thus, Kerr does not provide for the same low level of extractables as in the present invention.

9. Based upon the above facts, it is my opinion that Kerr does not disclose, teach, or suggest a release liner comprising a radiation curable release coating in an organic solvent coated onto a surface of a substrate having unexpected and significantly reduced amounts of extractables. Furthermore, it is my opinion that Kerr does not disclose, teach, or suggest that the resultant coating has no more than about 1.5 micrograms per square centimeter total extractables. There is no experimental evidence in Kerr that the level of extractables in the Kerr product is the same or less than in the present product. Therefore, it is not inherent that Kerr discloses the product with the same properties, such as a low level of extractables, as in the present invention.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: April 26, 2005

Danny Charles Thompson

223741